## Claims

What is claimed is:

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1. A cyclosporin analog of formula (I) or a pro-drug or a pharmaceutically acceptable salt thereof:

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wherein,

(a) A is of the formula:

$$(R)$$
 $(R)$ 
 $(R)$ 

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wherein

X Y is absent, -C1-C6 alkyl-, or -C3-C6 cycloalkyl-; is selected from the group consisting of:

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-C(O)-O-R1 where R1 is hydrogen, C1-C6 alkyl optionally substituted with halogen, heterocyclics, aryl, C1-C6 alkoxy or C1-C6 alkylthio, halogen substituted C1-C6 alkoxy, halogen substituted C1-C6 alkylthio;

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ii. -C(O)-S-R1 where R1 is hydrogen, C1-C6 alkyl optionally substituted with halogen, heterocyclics, aryl, C1-C6 alkoxy or C1-C6 alkylthio, halogen substituted C1-C6 alkoxy, halogen substituted C1-C6 alkylthio;

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5				iii.	optionalkox -C(S) option heter alkylt	n-OCH <sub>2</sub> -OC(O)R2 where R2 is C1-C6 alkyl, nally substituted with halogen, C1-C6 y, C1-C6 alkylthio, heterocyclics or aryl; -O-R1 where R1 is hydrogen, C1-C6 alkyl nally substituted with halogen, ocyclics, aryl, C1-C6 alkoxy or C1-C6 hio, halogen substituted C1-C6 alkylthio; and	
10				V.	optio heter alkylt halog	S-R1 where R1 is hydrogen, C1-C6 alkyl nally substituted with halogen, ocyclics, aryl, C1-C6 alkoxy or C1-C6 hio, halogen substituted C1-C6 alkoxy, ten substituted C1-C6 alkylthio.	
		(b)	В			hr- or –Nva-; and	
15		(c)	U		, -(D)Ser- or -[O-(2-hydroxyethyl)(D)Ser]-; or -[O-		
		acyl(D)Ser]- or -[O-(2-acyloxyethyl)(D)Ser]					
20	2.	A cyclosporin analog according to Claim 1 or a pro-drug or a pharmaceutically acceptable salt thereof, wherein in formula (I), B is - $\alpha$ Abu-, and U is -(D)Ala					
	3.	A cyc	clospor	rin analog according to Claim 1 or a pro-drug or a			
		phar	maceu	ically acceptable salt thereof, wherein in formula I:			
			(i)	A is of the formula A1 or A2, wherein:			
25			.,	Χ	is ab	sent; and	
				Υ	is sel	ected from a group consisting of:	
30					i.	-C(O)-O-R1 where R1 is hydrogen, C1-C6 alkyl optionally substituted with halogen, heterocyclics, aryl, C1-C6 alkoxy or C1- C6 alkylthio, halogen substituted C1-C6	
						alkoxy, halogen substituted C1-C6	
35					ii.	alkylthio; -C(O)-S-R1 where R1 is hydrogen, C1-C6 alkyl optionally substituted with halogen, heterocyclics, aryl, C1-C6 alkoxy or C1- C6 alkylthio, halogen substituted C1-C6 alkoxy, halogen substituted C1-C6 alkylthio; and	
						antymno, and	

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B r

iii. C(O)-OCH<sub>2</sub>-OC(O)R2 where R2 is C1-C6 alkyl optionally substituted with halogen,
 C1-C6 alkoxy, C1-C6 alkylthio, heterocyclics or aryl;

5 (ii) B is  $-\alpha$ Abu-; and

(iii) U is -(D)Ala-.

4. A cyclosporin analog according to claim 1 or a pro-drug or a pharmaceutically acceptable salt thereof, selected from the group consisting of:

Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is absent, Y =  $-COOCH_3$ :

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent, Y = -COOH;

15 Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is absent, Y = -COOEt;

Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is absent, Y =  $-COOCH_2CH_2CH_3$ :

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent, Y = -COOCH<sub>2</sub>Ph;

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent,  $Y = -COOCH_2F$ ;

Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is absent, Y =  $-COOCHF_2$ :

Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is absent, Y =  $-COOCF_3$ :

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent,  $Y = -COOCH_2CF_3$ ;

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent, Y = -COOCH<sub>2</sub>CI;

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent,  $Y = -COOCH_2OCH_3$ ;

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent,  $Y = -COOCH_2OCH_2OCH_3$ ;

Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent, Y =  $-C(=O)SCH_2Ph$ ;

Compound of Formula (I) wherein B =  $-\alpha$ Abu-, U = -(D)Ala-, X is - CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-, Y = -COOCH<sub>3</sub>; and

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Compound of Formula (I) wherein  $B = -\alpha Abu$ -, U = -(D)Ala-, X is absent, Y = -COOFmoc.

- 5. A chemical process for preparing a cyclosporin analog of formula I as claimed in Claim 1, comprising:
  - a. reacting a compound of formula I, wherein A= -MeBmt- with:
    - i. an olefin of formula CH2=CH-X-Y, wherein X and Y are as defined in Claim 1; and
    - ii. a catalyst;

in the presence of a lithium salt in an organic solvent; and

- b. hydrogenating the product of step a in an organic solvent under hydrogen with a catalyst;
   and optionally converting the product of said reaction into a pharmaceutically acceptable salt.
- 6. The chemical process as claimed in Claim 5, wherein the catalyst in step (a) (ii) is Grubb's ruthenium alkylidene, Nolan's catalyst, a benzylidene catalyst or a molybdenum catalyst.
- 7. The chemical process as claimed in Claim 5, wherein step (b) is performed at room temperature.
  - 8. The chemical process as claimed in Claim 7, wherein the catalyst in step (b) is Palladium on carbon.
  - 9. A pharmaceutical composition, said composition comprising at least one cyclosporin analog of formula 1 as claimed in Claim 1, said cyclosporin analog being present alone or in combination with a pharmaceutically acceptable carrier or excipient.
  - 10. A method for treating diseases characterized by airflow obstruction in a subject in need of treatment which comprises the step of administering to said subject a therapeutically effective amount of at least one cyclosporin analog of formula I as claimed in Claim 1.
    - 11. The method of Claim 10, wherein said disease is asthma.

12. The method of Claim 10, wherein the step of administering the cyclosporin analog of formula I is done by topical administration.